

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **08005370 A**

(43) Date of publication of application: **12.01.96**

(51) Int. Cl.
G01C 3/06
G02B 7/30
G03B 13/36

(21) Application number: **06133134**

(22) Date of filing: **15.06.94**

(71) Applicant: **CANON INC**

(72) Inventor: **YAMADA SHIGERU**
TANMACHI MASAHIRO

(54) **DISTANCE-MEASURING APPARATUS**

(57) Abstract:

PURPOSE: To provide a distance-measuring apparatus which can eliminate distance information of low reliability.

CONSTITUTION: The distance (a) of an object 1 from the principal point of a lens can be found by $(a) \propto (f) \cdot L / \delta$ when the focal distance of lenses 2a, 2b is designated as (f), the distance between optical axes of the lenses 2a, 2b is designated as L and the deviation amount of the image of the object 1 between a CCD area sensor 3b for a standard image and a CCD area sensor 3a for a reference image is designated as δ . The deviation amount δ is found when the correlation value of the illuminance data string of a plurality of pixels corresponding to the standard image and the reference image is operated by blocks 8, 9, 10. Then, when the difference between a maximum value and a minimum value in the illuminance data string is at a required value or lower, blocks 12, 13 judge that distance information regarding the illuminance data string is indefinite. Distance information which is found in this manner and data such as the indefinite distance information are stored in a distance-information-storage memory 11, and only distance information which is judged to be not indefinite and

whose reliability is high is output by a CPU 15. In addition, illuminance data is a logarithmically converted value.

COPYRIGHT: (C)1996,JPO

